

ABSTRACT

The invention relates to a method for the manufacture of piezoelectric multilayer actors in which thin layers of a piezoceramic material, called "green leaves" on which at least one internal electrode is applied, are stacked to form a block such that the internal electrodes are guided in alternation to oppositely lying surfaces of the actor, where they become bound together by an external electrode, the actor compact being sintered and subjected to abrasive shaping, and then the base metallization is applied for the external electrode.

In order to achieve insulation with a ceramic layer which can be applied after the sintering and the abrasive shaping, and thus satisfy even stringent requirements, it is proposed that areas to be insulated be coated by thick-layer methods with a paste consisting of an inorganic, low-sintering material or a mixture of materials and an organic binder system, and be then subjected to a burning-on process, the coating thickness after the sintering being between 1 and 40 μm , preferably between 2 and 20 μm , or between 4 and 15 μm .